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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,907	01/17/2002	Nobuyoshi Joe Maeji	05796.0008.NPUS00	9099
27194	7590	07/27/2005	EXAMINER	
HOWREY LLP C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DRIVE, SUITE 200 FALLS CHURCH, VA 22042-2924			NUTTER, NATHAN M	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/052,907

Applicant(s)

MAEJI ET AL.

Examiner

Nathan M. Nutter

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 136-139, 141-145, 147-154 and 168 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 136-139, 141-145, 147-154 and 168 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 June 2005 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 136-139, 141, 145, 147 and 168 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims relate to a "hybrid polymer" structure, but recite no details concerning the composition thereof or any other parameters that would enable an artisan of ordinary skill to know what is embraced thereby. The claims recite only physical characteristics which cannot be determinative of composition.

Art Unit: 1711

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 136-139, 141, 145, 147 and 168 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims fail to recite any compositional parameters or constitutional limitations on any particular classes of ingredients, such as polyolefins, that would clearly and distinctly define the subject matter to which applicants seek patent protection. As such, the claims are deemed to be vague and confusing.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 136-139, 141-145, 147-150, 153, 154 and 168 are rejected under 35 U.S.C. 102(b) as being anticipated by Gagnon et al (USPN 5,451,453), newly cited.

The reference to Gagnon et al (USPN 5,451,453) teaches production of the surface-modified macroporous polymer as recited at the Abstract for claim 154, column 4 (line 7) to column 5 (line 12) for the recitations of claims 136-139, inclusive, 142, 143 and 153. Further, note column 6 (lines 20-52) which teaches the surface modification of the resin. The resin, itself, may include the polypropylene or propylene ethylene rubber

Art Unit: 1711

as disclosed at column 5 (lines 18 et seq.). Note column 6 (line 53) to column 7 (line 2) for the grafting monomers, as recited in claims 141, 149-151 and 168. Further, note column 7 (lines 28-61), column 10 (lines 30-38 and 51-54) for claims 147 and 148.

Claims 136-139, 141-145, 147-150, 152, 153 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (USPN 5,691,431), newly cited.

The reference to Chen et al (USPN 5,691,431) shows the contemplated surface-modified macroporous polymer which has been modified and subsequently grafted, as herein claimed. Note column 5 (line 23) to column 6 (line 4) for the macroporous polymer, as recited in claims 136 and 141-145. Since there is nothing recited in the instant claims to differentiate the substrate resins of the reference from those recited herein, the physical characteristics recited in claim 145 would be deemed inherent thereto. Note column 8 (lines 32-68) for claims 149 and 150. Note column 15 (lines 24-46) for the thickness of the grafted surface as recited in claims 137-139 and 141.

Claims 136-139, 141-143, 145, 147-151 and 153 are rejected under 35 U.S.C. 102(b) as being anticipated by Mayes et al (USPN 6,150,459), newly cited.

The reference to Mayes et al (USPN 6,150,459) teaches the contemplated surface-modified macroporous polymer which has been modified and subsequently grafted, as herein claimed. Note column 3 (line 48) to column 4 (line 30) and the Abstract for the broad concept. Note column 6 (lines 1 et seq.) for the inclusion of macroporous substrates. Note column 6 (line 46) to column 7 (line 53) for the concepts

Art Unit: 1711

as recited in claims 137-139, 141 and 148. Note column 8 (lines 6-32) and column 8 (line 57) to column 9 (line 9). Finally, see column 15 (lines 19-30).

### ***Response to Arguments***

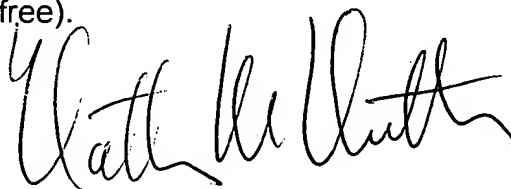
Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Nathan M. Nutter", is positioned above the printed name.

Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

nmn

25 July 2005